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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,935	07/08/2005	Werner Reinhardt	1093-133 PCT/US	8481
23869	7590	11/08/2007	EXAMINER	
HOFFMANN & BARON, LLP			BATTULA, PRADEEP CHOUDARY	
6900 JERICHO TURNPIKE			ART UNIT	PAPER NUMBER
SYOSSET, NY 11791			3722	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No.		Applicant(s)	
	10/541,935		REINHART, WERNER	
	Examiner		Art Unit	
	Pradeep C. Battula		3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 19 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/8/05 & 1/8/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

- mc
1. Claims ~~10~~¹² is rejected under 35 U.S.C. 102(a) as being anticipated by Heim (U.S. 2005/0151368).

In regards to Claim 10, Heim discloses a security document 1, in particular a value-bearing paper, comprising at least one window-like opening 3 in the substrate of the security document, said opening forming at least part of a security element (Paragraph 0047; Figures 1 & 2, Items 1, 3), wherein the window-like opening is of a configuration and size specific to the respective security document and is so adapted that the configuration (Paragraph 0047; Patch 2 is of a particular size so it can be a security element for the document) and size of the opening can be determined by means of the human sense of touch (considering it is an exposed hole it can be felt on one side), and wherein the opening is covered by a film 2 fixed on a surface of the substrate (Figure 2, Items 2, 3), wherein the film has a surface nature which is markedly different from the surface nature of the substrate in a manner which can be determined by means of the human sense of touch (Paragraph 0049; diffraction elements have a much different texture from paper), insofar as it is provided that a) the film projects beyond the opening of the substrate and in its projecting region is provided with at least

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one aperture through which the surface of the substrate can be felt and/or b) the film is three-dimensionally embossed at least region-wise to produce a particular structure (Paragraph 0057; the additional lacquer layer embossed on the A₁ layer), and/or c) the film is provided in a region-wise manner with a coating, for example printing thereon, which produces a special surface nature which can be felt, and/or d) the film is provided at least in its region covering the opening with a perforation in the form of a pattern which can be easily felt.

In regards to Claim 11, as applied to Claim 10, Heim further wherein the security document has a plurality of window-like openings 6 which can be felt in respect of size and configuration by means of the human sense of touch (Paragraph 0051, Lines 1 – 6; Figure 3, Item 6).

In regards to Claim 12, as applied to Claim 10, Heim further discloses wherein the openings are of differing configuration and/or size and/or are covered with a film having different properties (Figure 3, Items 4, 6; Security thread is below the windows 6 which at least two sizes).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. Claims 1, 2, 6 – 9, 13, 14, 16, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keller et al. (Keller; U.S. 2005/0012326) in view of Heim (U.S. 2005/0151368)

In regards to Claims 1 and 16, Keller discloses a security document 1, in particular a value-bearing paper (Paragraph 0046, Lines 8 – 14), comprising at least one security element 10 provided on a surface of the substrate forming the security document (Paragraph 0045), wherein to form the security element at least one surface region of the security document is of a configuration and size specific to the respective security document in such a way and is spatially displaced, for example recessed or raised, at least relative to the surface of the substrate which is adjacent or surrounding the surface region (Paragraph 0043; Paragraph 0045; several layers of different material will be raised), and/or is of such a different roughness, hardness, elasticity, slipperiness, thermal conductivity and/or stickiness, that the configuration and size of the surface region can be established as a consequence of the differing surface nature thereof by means of the human sense of touch (Paragraphs 0043 & 0045; the different material and several extra layers will be distinguishable by touch), and wherein the at least one surface region is formed by a film portion 3, 4, 9, 11 (Examiner considers the foil and elements to be a film) which is of a corresponding configuration and which is applied to the substrate and which comprises a material different from the substrate (Paragraph 0045; Figure 4, Item 11) and gaps in the security element (Paragraph 0044).

Keller does not disclose that the film has openings through which the surface of the substrate can be felt and wherein the substrate has at least one surface region of a surface nature which differs in relation to the surrounding surface of the substrate, and at least one opening.

Heim discloses of a substrate S having a security element 4 (Paragraph 0057, Lines 1 – 5; Figure 1, item 4; Figure 8, Item S) wherein a gap 9 exists in the security element (Paragraph 0064) that exposes the substrate (Figure 8, Items 9, S). Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide the gaps of Keller all the way to the substrate in order to have clear patterns and encodings in the security thread.

In regards to Claim 2, as applied to Claim 1, Keller modified by Heim further discloses wherein the substrate and the film portion are formed by different kinds of film, which markedly differ in properties which can be detected by means of the human sense of touch (Paper [Examiner considers paper a film] and metal are quite distinguishable by touch).

In regards to Claim 6, 7, and 17, as applied to Claim 1, Keller does not disclose wherein the security document has a plurality of surface regions which have different surface properties in relation to the substrate surface and wherein the document is provided with at least one further security element which can be checked optically or by machine.

Heim discloses two security elements 2, 4 wherein one is a thread as discussed above and another element as a patch (Paragraph 0047). Therefore it would have been

obvious to a person having ordinary skill in the art at the time the invention was made to provide two security elements to Keller in order to increase the security of the document.

In regards to Claim 8, as applied to Claim 1, Keller modified by Heim further discloses wherein the film is three-dimensionally embossed at least in region-wise manner for producing a particular structure (Paragraph 0016; different contours as described disclose a three dimensional embossment).

In regards to Claim 9, as applied to Claim 1, Keller modified by Heim further discloses wherein the film is provided in region-wise manner with a coating, for example printing thereon, which produces a special surface nature which can be felt (Paragraph 0057 & 0058; ink is much different texture, especially when contoured, to the paper substrate).

In regards to Claims 13 and 14, as applied to Claim 1, Keller modified by Heim further discloses wherein the edge of the at least one surface region (having element 2) is in the configuration of a simple geometrical figure and wherein the at least one surface region is in the form of an elongate rectangle, in particular of a strip shape (Figure 1, Item 2; The element is rectangular and is a strip running across the secure document).

In regards to Claim 19, as applied to Claim 17, Keller modified by Heim further discloses wherein that the security element which can be optically checked is formed by a pattern comprising diffraction structures, for example a hologram, and/or a region-wise metallization (Paragraph 0062; Heim).

3. Claims 3 – 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keller in view of Heim and Crane (U.S. 4,534,398).

In regards to Claim 3, as applied to Claim 1, Keller modified by Heim does not disclose wherein the substrate and the film portion are formed by papers with respective markedly different surface properties which can be determined by means of the human sense of touch.

Crane discloses a film security element 10, 11 for a security document 16 wherein the security document substrate is made of paper as well as the security element (Column 2, Lines 59 – 62; Figure 1, Items 10, 11; Figure 2, Item 16). Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide the security element with a paper in order to provide a security document having similar structure while actually making it more difficult to counterfeit.

In regards to Claim 4, as applied to Claim 3, Keller modified by Heim and Crane further discloses wherein the different surface properties of the papers are formed by corresponding printing (Paragraphs 0057 & 0058 show that the security element is printed on and because of the elements composition the surface properties are different from the document substrate it is on; Keller).

In regards to Claim 5, as applied to Claim 3, Keller modified by Heim and Crane further discloses wherein the different surface properties of the papers are produced by region-wise mechanical processing of the papers, in particular by roughening, embossing and/or glazing (Paragraph 0016; Keller).

4. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Keller and Heim as applied to claim 1 above, and further in view of Tanaka et al. (Tanaka; U.S. 5,582,103).

In regards to Claim 15, as applied to Claim 1, Keller modified by Heim does not disclose wherein at least in the at least one surface region the substrate is deformed by embossing to provide forwardly curved portions on a surface of the substrate and corresponding recesses on the other surface of the substrate.

Tanaka discloses embossments 1a on one surface of a substrate 4 and recesses 1b on the opposite surface of the substrate corresponding to the embossments (Column 4, Lines 10 – 23; Figure 4, Items 1a, 1b). The embossments further have a film of ink 2 on them (Column 4, Lines 48 – 53; Figure 4, Item 2; and because of the raised status one can feel the difference between the ink and the substrate). Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a surface region of Tanaka in order to provide a security element helping to portray an image (Tanaka).

Allowable Subject Matter

Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pradeep C. Battula whose telephone number is 571-272-2142. The examiner can normally be reached on Mon. - Thurs. & alternating Fri. 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica S. Carter can be reached on 571-272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PCB
Patent Examiner
October 18, 2007

Monica S. Carter
MONICA CARTER
SUPERVISORY PATENT EXAMINER